

U.S. Census Bureau
Refractories - 2010
MA327C (10)-1
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Address inquiries concerning these data to Primary Goods Industries
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Construction Division, Washington DC, 20233-6900, or call Georgia
Somarakis, 301-763-9833.

Table 1. Value of Shipments of Refractories: 2010 to 2006
[Value in thousands of dollars]

Product class code	Product description	Year	Value
3271240	Clay refractories	2010	818,374
		2009	r/ 638,190
		2008	924,627
		2007	964,699
		2006	962,973
3271250	Nonclay refractories	2010	1,324,805
		2009	1,424,747
		2008	1,598,219
		2007	1,304,493
		2006	1,163,552

Table 2. Quantity and Value of Shipments of Refractories by Type: 2010 and 2009
[Value in thousands of dollars]

Product code	Product description	No. of cos.		Quantity shipped (unit of measure)		M bricks (1,000 9-inch equivalent)		Value of shipments
				Short tons	Metric tons			
3271240	Clay refractories	2010	(X)	(X)	(X)	(X)		810,197
		2009		(X)	(X)	(X)	r/	615,823
3271240125	Fireclay, high alumina, and insulating brick shapes. 1/	2010	47	344,195	312,049	(S)	b/	483,062
		2009	r/	284,504	r/ 257,935	(S)	a/	360,691
3271240135	Unshaped clay refractory bonding mortars, castable refractories, and gunning mixes. 2/, 3/	2010	35	a/ 425,799	a/ 386,042	(X)	a/	310,871
		2009	a/ r/	353,559	a/ r/ 320,546	(X)	r/	255,132
3271240451	Clay and high alumina refractory raw materials. 4/	2010	8	75,956	(S)	(X)		(S)
		2009		(D)	(D)	(X)		(D)
3271240461	Clay and high alumina refractory materials. 5/	2010	9	c/ 27,057	c/ 24,531	(X)		16,264
		2009		(D)	(D)	(X)		(D)
3271250	Nonclay refractories	2010	(X)	(X)	(X)	(X)		637,773
		2009		(X)	(X)	(X)		1,209,216
3271250125	Magnesite-chrome, chrome-magnesite, including high fires, burned and unburned brick, and chrome brick.	2010	9	(D)	(D)	(D)		(D)
		2009	r/	281,591	r/ 255,296	r/ 5,871	r/	486,275
3271250135	All other brick and shapes, including dolomite, dolomite magnesite, forsterite, pyrophyllite-zircon, carbon and graphite crucibles, retorts, stopper heads, natural graphite refractories, and molten cast	2010	23	172,505	156,396	6,527		481,297
		2009	r/	260,559	r/ 236,228	(D)	r/	552,322
3271250145	Unshaped nonclay refractories basic bonding mortars made predominately of magnesite or chrome ore, dolomite, and other nonclay mortars, made predominately of forsterite, zircon, and silica	2010	27	211,854	192,071	(X)		156,476
		2009	r/	222,021	r/ 201,290	(X)	r/	170,619
3271250256	Domestic shipments for direct use by customers as a finished refractory and all exported material. 5/	2010	14	(D)	(D)	(X)		(D)
		2009		(D)	(D)	(X)		(D)
3271250261	All other domestic shipments of nonclay refractory materials sold in lump or ground form as refractory raw material. 4/	2010	10	(D)	(D)	(X)		(D)
		2009		(D)	(D)	(X)		(D)

Footnotes:

1/ Includes high alumina pouring pit refractories (containing 50% alumina and over), sleeves, nozzles, runners, and ladle gate parts. Excludes data for mullite and extra-high alumina refractories. These products are included in the nonclay refractories section.

2/ Includes products referred to as plastic firebrick and the less plastic materials intended for ramming into place after the addition of water (when shipped in dry form).

3/ Includes hydraulic setting castables designed for low thermal conductivity and having bulk densities as defined in ASTM classification C-401, not greater than 105 pounds/cubic foot.

4/ Includes shipments to refractory producers for reprocessing in the manufacture of brick and other refractories.

5/ Includes shipments for direct use as finished refractory products by establishments classified in manufacturing industries and excludes shipments to refractory producers for reprocessing in the manufacture of brick and other refractories. Includes all exports.

Table 3. Shipments, Exports, and Imports of Refractories by Type: 2010 and 2009
[Value in thousands of dollars]

Product code 1/	Product description	Year	Manufacturers' shipments	Exports of domestic merchandise 2/ (value at port)	Imports for consumption 3/
3271240125	Fireclay, high alumina, and insulating brick shapes	2010 b/	483,062	59,940	75,840
		2009 a/	360,691	67,420	77,769
3271240135	Unshaped clay refractory bonding mortars, castable refractories, and gunning mixes.	2010 a/	310,871	38,851	2,777
		2009 r/	255,132	31,689	1,510
3271250125	Nonclay magnesite-chrome, chrome-magnesite, including high fires, burned and unburned brick, and chrome brick.	2010	(D)	11,544	101,720
		2009 r/	486,275	52,843	93,661
3271250135	All other nonclay brick and shapes	2010	481,297	217,473	152,620
		2009 r/	552,322	187,168	129,832
3271250145	Unshaped nonclay refractories and gunning mixes	2010	156,476	150,427	57,343
		2009 r/	170,619	111,898	27,290

Footnotes:

1/ For comparison of North American Industry Classification System (NAICS)-Based product codes with Schedule B export numbers and HTSUSA import numbers, see Table 4.

2/ Source: Census Bureau report EM 545, U.S. Exports.

3/ Source: Census Bureau report IM 146, U.S. Imports for Consumption and General Imports.

Table 4. Comparison of North American Industry Classification System (NAICS)-Based Product Codes with Schedule B Export Codes, and HTSUSA Import Codes: 2010

Product code	Product description	Export code 1/	Import code 2/
3271240125	Fireclay, high alumina, and insulating brick shapes	6902.20.1010	6902.20.1010
		6902.20.5010	6902.20.5010
		6902.90.1010	6902.90.1010
		6902.90.5010	6902.90.5010
		6903.90.0010	6903.90.0010
3271240135	Unshaped clay refractory bonding mortars, castable refractories, and gunning mixes.	3816.00.0010	3816.00.0010
3271250125	Nonclay magnesite-chrome, chrome-magnesite, including high fires, burned and unburned	6902.10.1000	6902.10.1000
		6902.10.5000	6902.10.5000
3271250135	All other nonclay brick and shapes	6902.20.1020	6902.20.1020
		6902.20.5020	6902.20.5020
		6902.90.1020	6902.90.1020
		6902.90.5020	6902.90.5020
		6903.90.0050	6903.90.0050
3271250145	Unshaped nonclay refractories and gunning mixes	3816.00.0050	3816.00.0050

Footnotes:

1/ Source: 2010 edition, Harmonized System-based Schedule B, Statistical Classification of Domestic and Foreign Commodities Exported from the United States.

2/ Source: Harmonized Tariff Schedule of the United States, Annotated (2010).

Symbols:

- (D) - Withheld to avoid disclosing data of individual companies.
- (X) - Not applicable.
- (NA) - Not available.
- r/ - Revised by 5 percent or more from previously published data.
- (n.e.c.) - Not elsewhere classified.
- (n.s.k.) - Not specified by kind.
- (nehp) - Net engine horsepower
- (btuh) - British thermal units per hour
- (pt.) Part.
- Represents zero.

Estimation symbols - Percent of estimation for each item is indicated as follows:

- a/ - 10 to 19 percent of this item has been estimated.
- b/ - 20 to 29 percent of this item has been estimated.
- c/ - 30 to 49 percent of this item has been estimated.
- (S) - Withheld because estimates did not meet publication standards

HISTORICAL NOTE

The Census Bureau has collected data on refractories since 1947.

Historical Current Industrial Reports data (called Facts for Industry before 1959) may be obtained from a Federal Depository Library. To locate a Federal Depository Library in your area, please visit <http://www.gpoaccess.gov/libraries.html>.